

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-00900053-2012**
Application Received: **March 13, 2012**
Plant Identification Number: **03-54-009-00053**
Permittee: **Valero Terrestrial Corporation**
Facility Name: **d/b/a Brooke County Sanitary Landfill**
Mailing Address: **Route 2, Box 410, Colliers, WV 26035**

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| Physical Location: | Colliers, Brooke County, West Virginia |
| UTM Coordinates: | 535.865 km Easting • 4469.677 km Northing • Zone 17 |
| Directions: | Following U.S. Route 22 West from Pittsburgh, PA toward Weirton, WV, exit onto Harmon Creek Road (County Rd. 1), travel south (left off of ramp) approximately 1 mile. Look for sign on right for Brooke County Sanitary Landfill and turn right onto Petrilli Road (County Rd. 1/1). Follow this road about 1 mile to top of hill to scale house. |

Facility Description

The Valero Terrestrial Corporation d/b/a Brooke County Sanitary Landfill (BCSL) is a non-hazardous municipal solid waste (MSW) landfill that began operation in the 1970's. It has a North American Industry Classification System (NAICS) code of 562212 and a Standard Industrial Classification (SIC) code of 4953. The facility is a 196-acre municipal solid waste landfill that has a disposal area of 180 acres. The BCSL has a maximum tonnage rate of 20,000 tons municipal solid waste per month. The landfill accepts residential, commercial, industrial, construction/demolition debris, non-hazardous industrial waste, institutional waste, autoclaved or sterilized waste, and petroleum contaminated soil.

Emissions Summary

| Plantwide Emissions Summary [Tons per Year] | | |
|---|-------------------------------|-----------------------|
| Regulated Pollutants | Potential Emissions | 2010 Actual Emissions |
| Carbon Monoxide (CO) | 31.1 | 2.65 |
| Nitrogen Oxides (NO _x) | 12.73 | 3.51 |
| Particulate Matter (PM _{2.5}) | 11.712 | 0.46 |
| Particulate Matter (PM ₁₀) | 78.1 | 3.07 |
| Total Particulate Matter (TSP) | 78.1 | 3.08 |
| Sulfur Dioxide (SO ₂) | 51.33 | 0.002 |
| Volatile Organic Compounds (VOC) | 72.25 | 13.38 |
| <i>PM₁₀ is a component of TSP.</i> | | |
| Hazardous Air Pollutants | Potential Emissions | 2010 Actual Emissions |
| 1,1,2- Trichloroethane | 0.024 | 0.004 |
| Acrylonitrile | 1.188 | 0.196 |
| Benzene | 0.288 | 0.048 |
| Carbon Disulfide | 0.084 | 0.014 |
| Carbon Tetrachloride | 0.012 | 0.002 |
| Carbonyl Sulfide | 0.054 | 0.009 |
| Chlorobenzene | 0.054 | 0.009 |
| Chloroform | 0.006 | 0.001 |
| Mercury | 0.156 | 0.026 |
| Methyl Isobutyl Ketone | 0.234 | 0.039 |
| Toluene | 7.038 | 1.173 |
| Vinyl Chloride | 0.888 | 0.148 |
| Xylene | 2.502 | 0.417 |
| Total | 12.528 | 2.0865 |
| <i>Some of the above HAPs may be counted as PM or VOCs.</i> | | |
| Regulated Pollutants other than HAPs | Potential Emissions | 2010 Actual Emissions |
| Non Methane Organic Compounds (NMOC) | 864.2 (Projected for 2045) | 63.99 |
| <i>Non-methane organic compounds (NMOC) – The actual current emission rate estimate (calculated for year 2012) is 344.4 Mg/yr. The projected closure year is 2045 with a projected maximum uncontrolled NMOC emission rate estimate of 784 Mg/yr (864.2 TPY). The NMOC emission rate estimates were calculated using EPA's Landfill Gas Emissions Model (LandGEM) software. The values used for k and Lo were 0.050 year⁻¹ and 170 m³/Mg, respectively. The NMOC concentration used in the model was 4000 ppmv. BCSL's Gas Collection and Control System (GCCS) design plan was approved on July 10, 2003 by WVDEP/DAQ.</i> | | |

Title V Program Applicability Basis

This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters. Due to this facility's design capacity, BCSL is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

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| Federal and State: | 45CSR6 | Open burning prohibited. |
| | 45CSR7 | To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations |
| | 45CSR11 | Standby plans for emergency episodes. |
| | 45CSR13 | Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation |
| | 45CSR16 | Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. Part 60 |
| | 45CSR23 | To Prevent and Control Emissions from Municipal Solid Waste Landfills |
| | WV Code § 22-5-4 (a) (14) | The Secretary can request any pertinent information such as annual emission inventory reporting. |
| | 45CSR30 | Operating permit requirement. |
| | 45CSR34 | Emission Standards for Hazardous Air Pollutants |
| | 40 C.F.R. Part 61 | Asbestos inspection and removal |
| | 40 C.F.R. Part 60 Subpart OOO | Standard of Performance for Nonmetallic Mineral Processing Plants |
| | 40 C.F.R. Part 60 Subpart WWW | Standard of Performance for Municipal Solid Waste Landfills |
| | 40 C.F.R. Part 63 Subpart AAAA | National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfill |
| | 40 C.F.R. Part 63 Subpart ZZZZ | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines |
| | 40 C.F.R. Part 82, Subpart F | Ozone depleting substances |
| State Only: | 45CSR4 | No objectionable odors. |
| | 45CSR17 | To Prevent and Control Particulate Matter Air Pollution from Material Handling, Preparation , Storage and other sources of Fugitive Particulate Matter |

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

| Permit or Consent Order Number | Date of Issuance | Permit Determinations or Amendments That Affect the Permit (<i>if any</i>) |
|-----------------------------------|---------------------|---|
| R13-2475B | August 18, 2011 | |
| R13-2480 | February 26, 2003 | |

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

Determinations and Justifications

Since R30-00900053-2007 (MM01) was issued, there have been no changes to the Valero Terrestrial Corporation d/b/a Brooke County Sanitary Landfill (BCSL) that is located at Colliers, WV.

The following updates were made to this renewal permit:

1. The regulatory language was updated for Sections 3.1.1 and 3.1.2, 45CSR§§6-3.1 and 3.2.
2. 45CSR34 incorporates and is now cited with 40 C.F.R. Part 61 because 45CSR15 was repealed. The citation for 3.1.3 has been revised accordingly.
3. The boilerplate language for Section 3.3.1 was revised with the addition of Section 3.3.1.d and the citation was also revised to expand the authority of the West Virginia state code.
4. Sections 3.5.3 and 3.5.5 were revised according to US EPA Region 3's request that all annual compliance certifications be submitted electronically (e-mail). Also, the US EPA Region 3 address in Section 3.5.3 was recently revised. These are general changes to the boiler plate language.
5. Since 40 C.F.R. Part 60 Subpart WWW was not adopted and incorporated in 45CSR16 [45CSR§16-4.1.b.], 45CSR16 was removed from the citation of Sections 4.1.1 through 4.1.8, 4.2.1 through 4.2.5, 4.4.1 through 4.4.4, 4.5.1, 4.5.2, 5.1.10, 5.2.2, 5.4.2, 5.4.3, and 5.5.2. 40 C.F.R. Part 60 Subpart WWW was adopted and incorporated in 45CSR23.
6. In the second sentence of Section 4.1.4, the "s" was removed from parameter to correspond with 40 C.F.R. § 60.753 (c) language.
7. Since the capacities of BCSL storage vessels, 01-T1, 01-T2 and 01-T3, are below the capacity requirements of 40 C.F.R. § 60.116b (b), Sections 4.1.10 and 4.1.11 were removed from the permit.
8. Citation for Section 5.1.1 was revised with the addition of "45CSR§6-4.1" and streamlining language was added since the hourly emission limit for PM in the table of Section 5.1.1 will demonstrate compliance with 45CSR§6-4.1. Also, Section 5.1.6 was removed and the remaining sections were renumbered accordingly.
9. Since EPA has determined that "normal" is not enforceable because it is not defined, "normal" was removed from "during periods of 'normal' facility operation" that is in the third sentence of the second paragraph of Section 5.2.1 in the first Title V permit renewal.

10. 40 C.F.R. Part 63 Subpart ZZZZ area source requirements were incorporated as Sections 6.1.17 – 6.1.21, 6.2.2 – 6.2.4, and 6.4.4 – 6.4.6.

Brooke County Sanitary Landfill has not made any significant modifications that would trigger a PSD permit; therefore, the requirements of the GHG tailoring rule do not apply.

40 C.F.R. Part 63 Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

The Brooke County Sanitary Landfill has a 250 HP diesel engine that is subject to the area source provisions of 40 C.F.R. Part 63 Subpart ZZZZ. The 250 HP diesel engine is an existing source constructed prior to June 12, 2006. The facility shall comply with all applicable requirements of 40 C.F.R. Part 63 Subpart ZZZZ by May 3, 2013 per 40 C.F.R. § 63.6595 (see Section 6.1.17.).

Although non-major area source MACT provisions under 40 C.F.R. Part 63 Subpart ZZZZ are excluded from state delegation in 45CSR34, these requirements are applicable requirements under 45CSR§30-2.6.d, which includes any requirement subject to §112 of the CAA.

Engine (DG1) is subject to the requirements for a non-emergency, non-black start CI stationary RICE ≤300 HP as specified in Table 2d, Item 1 (change oil, filter, and inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary; minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes).

Following, are the applicable RICE MACT requirements according to the “Summary of Requirements” table provided by EPA.

| Emission Unit ID | Emission Limitations | Operating Limitations | Fuel Requirements | Performance Testing | Monitoring Requirements | Initial Compliance | Continuous Compliance | Record-keeping Requirements | Reporting Requirements |
|--|-----------------------------|------------------------------|--------------------------|----------------------------|--------------------------------|---------------------------|------------------------------|-------------------------------------|-------------------------------|
| DG1 Non-emergency, Non-black start CI stationary RICE ≤ 300 HP | § 63.6603 Table 2d | NONE | NONE | NONE | §§ 63.6625 (e), (h), (i) | NONE | § 63.6605 § 63.6640 | §§ 63.6655 (a), (b), (d), (e) | NONE |

The 250 HP diesel engine (DG1) is also subject to the general provisions of 40 C.F.R. Part 63; except per 40 C.F.R. § 63.6645 (a) (5) the following do not apply: 40 C.F.R. §§ 63.7 (b) and (c), 63.8 (e), (f) (4), and (f) (6), and 63.9 (b) – (e), (g), and (h).

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

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|-----------------------------------|---|
| 40 C.F.R. § 60.757 (a) (3) | The design capacity of this facility is greater than 2.5 million megagrams and 2.5 million cubic meters. Therefore, amended design capacity reports are not required. |
| 40 C.F.R. Part 64 | This is the second permit renewal for this facility. The facility was found not to be subject to Compliance Assurance Monitoring (CAM) at the time of the first renewal since the facility did not have any pollutant specific emissions units (PSEU) that satisfied all of the applicability criteria requirements of 40 CFR § 64.2 (a). There have been no changes to any PSEUS at the facility since the first renewal that have resulted in a source satisfying the applicability requirements of 40 C.F.R. § 64.2 (a) and becoming subject to CAM. |

Request for Variances or Alternatives

None

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: August 10, 2012
Ending Date: September 10, 2012

All written comments should be addressed to the following individual and office:

Wayne Green
Title V Permit Writer
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact

Wayne Green
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1258 • Fax: 304/926-0478

Response to Comments (Statement of Basis)

(Choose) Not applicable.

OR

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.